PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF PRESENCE AND SAMPLING VIDEO DETECTION FOR ALL APPROACHES AT THE INTERSECTION OF MD 97 (GEORGIA AVENUE) AND MD 193 (UNIVERSITY BOULEVARD) IN MONTGOMERY COUNTY, DUE TO THE RESURFACING AND SAFETY IMPROVEMENTS TO MD 97. APS WILL BE INSTALLED TO CROSS ALL LEGS OF THE INTERSECTION AND COUNTDOWN LED PEDESTRIAN SIGNAL HEADS WILL REPLACE THE EXISTING PEDESTRIAN SIGNAL HEADS. ALL EXISTING VEHICULAR TRAFFIC SIGNAL HEADS WILL REMAIN. MD 97 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

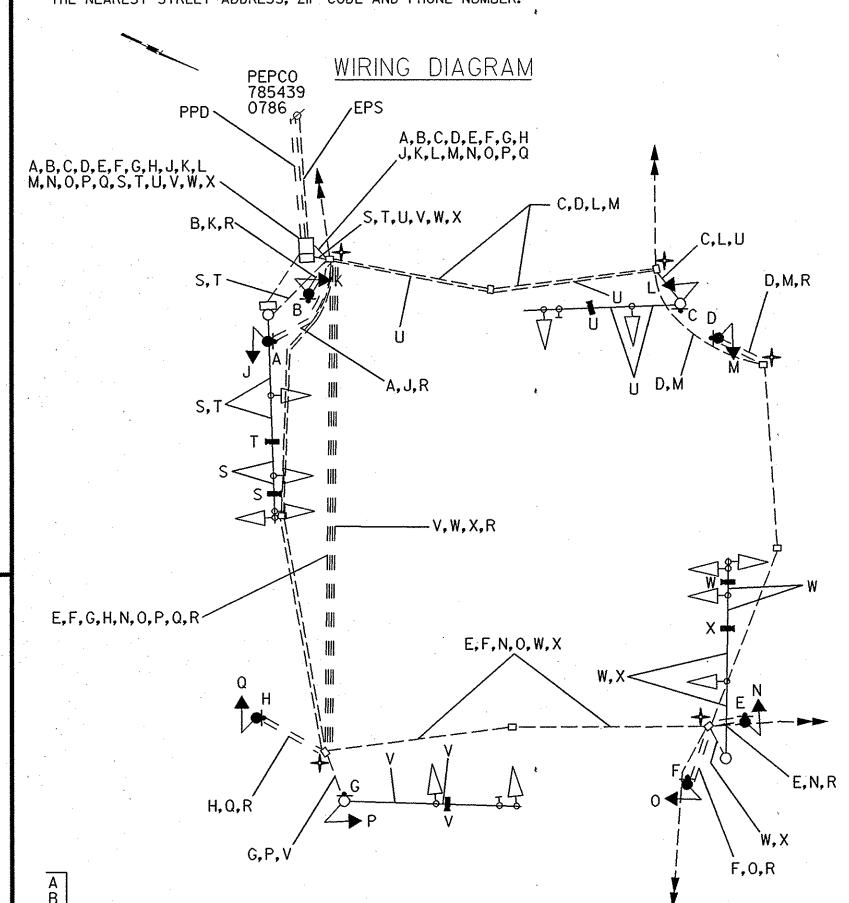
THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE LEFT TURN PHASING FOR NORTH AND SOUTHBOUND APPROACHES. THE CONCURRENT MAINLINE PEDESTRIAN PHASE WILL REMAIN AND A ALTERNATE SIDE STREE PEDESTRIAN PHASE IS PROPOSED.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CONTROLLER SHALL REMAIN. VIDEO PRESENCE AND SAMPLING DETECTION IS PROPOSED FOR ALL APPROACHES. THE SHA SIGNAL SHOP WILL INSTALL THE VIDEO DETECTION INTERFACE EQUIPMENT AND A 2-WIRE CENTRAL CONTROL UNIT WITHIN THE CABINET.

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PHONE DROP
THE CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD OF MONTGOMERY COUNTY AT 240-777-8761
FOR THE PHONE DROP LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. HAMUD WITH
THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.



_ELECTRICAL CABLE -2 CONDUCTOR (NO.14 AWG)

K L M ELECTRICAL CABLE -N 5 CONDUCTOR (NO.14 AWG) O

R-No. 6 AWG STRANDED BARE COPPER GROUND WIRE

CONTROL CABLE, 250 FOOT, VIDEO
DETECTION CAMERA TO CONTROLLER

W CONTROL CABLE, 500 FOOT, VIDEO X DETECTION CAMERA TO CONTROLLER

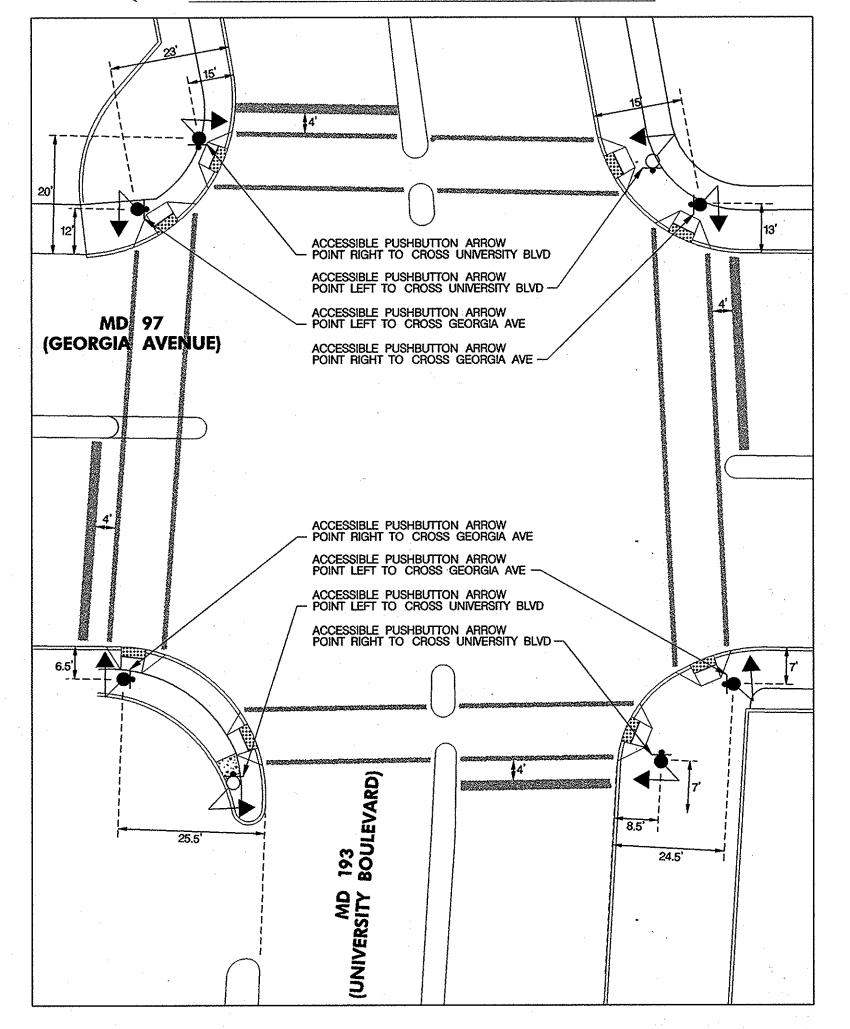
PROPOSED TELEPHONE SERVICE
TO BE INSTALLED BY OTHERS

EPS - EXISTING POWER SOURCE

EXISTING GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH.

OPERATION

PROPOSED PEDESTAL POLE, APS AND PAVEMENT MARKING DETAIL LAYOUT



PHASE CHART

		2	3	4	5	6	7	8	9	10		12	13	14	15	16	17	18	19	20	
	(C)	REE	(C)	8	(A)	***	@ © ©	(a) (b) (c) (d)	æ (3) •	3	(2)	(A) (Y) (4)	\$88	≴88	≴ 88	☆88	≉88	☆88	≉88	£88	
PHASE I & 5	+6	→6	R	R	46		. R	R	R	R	R⁺	R	DW	DW	DW	DW	DW	DW	DW	DW	<u> </u>
PHASE I & 5 CHANGE		THE CONTROLLER MAY SKIP TO PHASE I & 6, 2 & 5, OR 2 & 6							 												
PHASE I & 6	- 'G	-6	G	G	→R	-R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	D₩	
PHASE I CHANGE		Y	G	Ç	R	R-	R	R	R	R	R	R	DW	DW .	DW	DW	DW	DW	DW	DW	TT_
PHASE 2 & 5	→R	- R -	R	R	 G -	-6 -	G	G	R	R	R	R	DW	D₩	DW	DW	DW	DW .	DW	DW	
PHASE 5 CHANGE	→R	-R	R	R		Y	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW	H .
PHASE 2 & 6	→R -	-n-	G	G	▼R	-R	G	G	R	R	R	, R	W	W	W	W	DW	. DW	DW	DW	o
PED. CLEARANCE / COUNTDOWN	→R	→R-	G	G	- R	→R-	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW	
PHASE 2 & 6 CHANGE	-R -	→R-	Y	Υ	→R	R-	Υ	Y	R	R	R	R	DW	DW	DW	ÐW	DW	DW	DW	DW	
PHASE 4 & 8	 R-	- R -	R	R	- R	- ₽	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW	
PHASE 4 & 8 CHANGE	→ R-	→ R-	R	R		→ R-	R	R	Y	Y	Y	Υ	DW	DW	DW	DW	DW	DW	DW	DW	F '
PHASE 4 & 8 ALT.	R	- R-	R	Ŕ	-R	R-	R	R	G	G	G	G	DW	DW	DW	DW	w	W	W	w	9 9
PED. CLEARANCE / COUNTDOWN	→ R-		R	R	R	→R-	R	R	G	G	c-	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW	
PHASE 4 & 8 ALT. CHANGE	→R-	■R	R	R		→R-	R	R	Y	Ÿ	Y	Υ	DW	DW	DW	DW	DW	DW	DW	DW	
FLASHING	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK	

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Jeff Wentz Assistant District Engineer - Traffic Phone: 301-513-7358

Mr. Augie Rebish Assistant District Engineer - Utility Phone: 301-513-7350

Mr. Richard L. Daff Sr. Chief, Traffic Operations Division Phone: 410-787-7630

Upper Marlboro, Maryland 20772 Phone: 301-961-5325

8300 Old Marlboro Pike

Mr. Keith Lord

Montgomery County Phone: 301-279-1291

The Power Company Representative is: Potomac Electric Power Company

Montgomery County Department of Public Works Phone: 240-777-8761

Mr. Wayne Mowdy Assistant District Engineer - Maintenance Phone: 301-513-7304

	ITEM NO	QUANTITY	DESCRIPTION
	900000	I EA	VIDEO DETECTION INTERFACE EQUIPMENT: 5-8 CAMERAS
	973023	96 SF	SHEET ALUMINUM SIGNS:
			4 EA - RIO-4(I)MOD, (9 IN. X IS IN.) POLE MOUNT, "PUSH BUTTON TO CROSS GEORGIA AVENUE"
,			4 EA - RIO-4(I)MOD, (9 IN. X 15 IN.) POLE MOUNT, "PUSH BUTTON TO CROSS UNIVERSITY BLVD"
	,		I EA - ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 97, RIGHT ARROW" (24 IN. X 51 IN.)
			I EA - ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 97, RIGHT ARROW" (24 IN. X 51 IN.)
			I EA - ASSOCIATED SHIELD ASSEMBLY "EAST, MD 193, RIGHT ARROW" (30 IN. X 51 IN.)
			I EA - ASSOCIATED SHIELD ASSEMBLY "WEST, MD 193, RIGHT ARROW" (30 IN. X 51 IN.)
			LEA- ASSOCIATED SHIELD ASSEMBLY

"EAST, MD 193, LEFT ARROW" (48 IN. X 75 IN.)

"WEST, MD 193, LEFT ARROW" (48 IN. X 75 IN.)

I EA - ASSOCIATED SHIELD ASSEMBLY

<u>EQUIPMENT LIST 'B'</u>

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

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ITEM NO	QUANTITY	DESCRIPTION
203030	7 CY	TEST PIT EXCAVATION
585412	750 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585424	160 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
655105	15 SF	5 INCH CONCRETE SIDEWALK
655383	165 SF	BRICK SIDEWALKS
800000	I EA	2-WIRE CENTRAL CONTROL UNIT
800000	I EA	2 INCH PVC CONDUIT BEND IN EXISTING BASE MOUNTED CABINET
800000	8 EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON
800000	8 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION - POLE MOUNT
800000	, I LS	REMOVE AND DISPOSE OF TRAFFIC SIGNAL EQUIPMENT
801004	7 CY	CONCRETE FOR SIGNAL FOUNDATION
802501	90 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805125	90 LF	2 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
805135	90 LF	3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
813015	96 SF	INSTALL OVERHEAD SIGN
816001	6 EA	VIDEO DETECTION CAMERA
816005	4 EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816010	2 EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
818004	7 EA	10 FOOT BREAKAWAY PEDESTAL POLE
861105	1250 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
861107	1350 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO QUANTITY

DESCRIPTION

NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 97 (GEORGIA AVENUE) AND MD 193 (UNIVERSITY BOULEVARD)

GENERAL I	INFORMATION
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SCALE NONE	DATE	12/2006	CONTRACT NO. MO5665177					
DESIGNED BY	SBS	COUNT	Y MONTGOMERY					
DRAWN BYSBS		LOGMIL	E 15009703.27					
CHECKED BY	BAB	T.I.M	T.I.M.S. NO. <u>H326</u>					
F.A.P. NO	,	_ TOD N	0					
			T					
DRAWING NO.	TS-211A	OF	SHEET NO. OF					

STV Incorporated
engineers / architects / planners / construction managers

7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-9112